

Borough of Accrington.

PUBLIC HEALTH DEPARTMENT.

Annual Report
OF THE
Medical Officer

For the Year 1914.

ARTHUR GREENHALGH,
M.B., Ch.B., M.R.C.S., D.P.H.,
MEDICAL OFFICER OF HEALTH.

HEALTH COMMITTEE.

From November, 1914, to November, 1915.

Chairman - - - - Alderman W. H. RAWSON.

Vice-Chairman - Councillor J. H. LUPTON.

THE MAYOR (Councillor J. HARWOOD).

Alderman D. C. DEWHURST.

,, J. C. LUPTON.

Councillor J. W. ASHWORTH.

,, J. BARLOW.

,, J. ENTWISLE.

,, F. LORD.

,, T. MORLEY.

,, W. SMITH.

,, J. SUDALL.

,, W. R. SWAN.

,, W. R. TOUGH.

,, E. WELCH.

,, S. WOOLER.

Day of Meeting :

Thursday, generally the third in the month, at 4-15 p.m.

PUBLIC HEALTH DEPARTMENT.

Medical Officer of Health :

ARTHUR GREENHALGH, M.B., Ch.B., M.R.C.S., D.P.H.

Chief Sanitary Inspector :

RICHARD DIGGLE, Assoc. Royal San. Inst.

Assistant Sanitary Inspector :

JOHN E. CRAWSHAW, Cert. Royal San. Inst.

Health Visitors and School Nurses :

MISS W. W. BRODIE.

MISS C. MUNRO.

Clerks :

JOHN A. HINDLE.

JOHN E. SPENCER.

JAMES N. SHAW.

Disinfector and Caretaker of Smallpox Hospital :

JOHN R. WOODCOCK.

Foremen of Scavenging Departments :

WILLIAM HOWARD.

WILLIAM T. BIRTLES.

To the Sanitary Authority of the Borough of Accrington.

GENTLEMEN,

I have the honour to submit for your consideration, my Report on the Health and Sanitary condition of the Borough for the year ending 31st December, 1914.

I estimate the population of the Borough at the middle of the year 1914 to be 45,775, and this is the figure upon which all the rates are calculated in this report.

During the year 1914, with the exception of the preparatory survey work for a more efficient drainage system for the Green Haworth district of the Borough, I have no new sanitary measures of importance to refer to, as having been commenced during this period. This fact must not be considered as indicating that the Health Committee consider that we are at a state of perfection in our sanitary arrangements, but rather that in the past few years, considerable and costly advances in sanitary administration have been instituted, and a pause has occurred to see the results of past efforts.

The reform of the commodious dry ashpit to the more sanitary, and in every way better ashbin, is continuously going on, and is giving satisfaction to householders. This change which carries with it the more frequent removal of refuse from the vicinity of households, is a measure of the greatest sanitary importance, and it is encouraging to find from letters sent to the Health Office, the deep resentment against careless people who in ignorance place putrifiable material in their ashpits ; a nuisance and a danger to their neighbours and themselves. The desire for a separate ashbin, one that is frequently and regularly cleared, is, I am pleased to find, a very frequent wish of the many householders who are not so arranged for.

The Waste Water System of conservancy for closets, which was a great advance from what was called the Lancashire Midden, which in turn was succeeded by the Pail System, in my opinion is open to many objections.

I cannot help but think that its chiefest recommendation over the Fresh Water System, was the evasion of the 6/- a year tax, which was put upon the users of fresh water closets by the water authorities; yet as users of fresh water they are often a far greater tax upon our water reserves than cistern closets, owing to the frequent habit of allowing the slop tap to run for quite long periods, for the purpose of thoroughly flushing the underground arrangements.

I would like to submit to the Health Committee, the desirability of considering whether the future provision of Waste Water Closets in new property should not be abolished in favour of Fresh Water Closets. Arrangements against the frost danger, are, I am convinced, not beyond the ingenuity of engineers to forestall. The provision of a W.C. inside the house is in my opinion a more essential need than the presence of a bath; the latter can be improvised much more easily and safely than the former and with good construction and reasonable care they are devoid of danger.

The arrangements for the daily visit to all the fish-shops, greengrocers' shops, and chipped potato shops, to collect their refuse, which was instituted last year, is working admirably, and giving the greatest satisfaction. The commercial use to which the fish portion of this refuse is being put, is markedly enhanced in value by the fresh condition in which it arrives at the works, and the process of treatment is made much cleaner, less dangerous and free from objection, and this is a great benefit to the men employed.

The crusade against the house fly and blue bottle fly pest has been continued on the lines of last year's experience, namely, the removal of the breeding grounds. In my big table, classifying the causes of deaths, only one death has been certified as due to Infective Enteritis, that is the form of diarrhoeal disease specially associated with this agent.

It is with great pleasure that I write on the earnest, tactful and persevering work done by Miss Brodie, our first Lady Health Visitor, up to the time when she was called away to her volunteer duties among the wounded of our gallant soldiers at the First Western General Military

Hospital. From the Matron and Sisters there, I have word that she maintains the same high character for efficiency and charm which we have so much valued during her service in Accrington. From Miss Brodie's departure, until the end of the year, Miss Spiers took up part of her work, and was a very great help in carrying out the details attendant on the feeding of necessitous school children, and in many other ways helped us over a difficult time.

The total number of deaths during the year was 640, seven less than the previous year, yet more than the average, there were 26 from Measles, and 11 from Whooping Cough, both very high figures. 71 Deaths occurred in Accrington residents which were registered outside the Borough, 44 of them at Pike Law, this is the greatest number in this class which we have ever been taxed with, up to last year, it was between 40 and 50 per annum that came under this head.

The Birth-rate is slightly lower than last year, but is higher than the average of the last five years.

The Infant Mortality rate, which works out at 117.64, leaves much to be desired, although lower than the average for the last ten years, which comes out at 123.75; this figure shows what a field of work there is to prevent a portion of this great waste of Infant life.

The Notification of Births Act was with the consent of the Local Government Board adopted by the Council this year, and was to have been put into operation in September, but owing to the depletion of my staff by the war, and the great additional work caused by the feeding of necessitous children, I have been quite unable to carry out the provisions of the Act, and so nothing has been done.

The efficient working of this Act will need the whole time of one nurse to do anything like justice to it.

Since the institution of the School Clinic for the treatment of minor ailments among school children, which is doing very excellent work, the whole time of one nurse has been engaged upon the work of School Medical Inspection, and the following up of defects noticed. Until the times are more settled, I can see little chance of giving this Act the attention it requires and deserves.

The staff of the Health Office, by the war, has been deprived of the Assistant Sanitary Inspector, Mr. John E. Crawshaw, who is serving as Sergeant in the 3rd Battalion Loyal North Lancashires, and the clerk, Mr. John A. Hindle, who is serving as Quarter-Master Sergeant in the 11th Battalion East Lancashire Regiment, and Miss Brodie whose services I have before referred to.

It is with pleasure that I refer to the very admirable way in which Mr. John R. Woodcock has taken upon himself many of the duties of the Assistant Sanitary Inspector; he has succeeded in preparing the Health and Mortality tables contained in this report. Mr. Diggle, the Chief Sanitary Inspector, has done all that a man can do, to make good the loss of staff which we have sustained, and he has been ably supported by Mr. John E. Spencer and all the other members of the staff, who have risen to the occasion, so that in the most material affairs, satisfactory attention has been given to the Sanitary needs of the Borough.

Again I have to tender my thanks to the Town Clerk, the Borough Engineer, the Chief and Assistant Sanitary Inspectors, as well as the Chairman and Members of the Health Committee, for many kindnesses during the year.

I have the honour to be, Gentlemen.

Your obedient servant,

ARTHUR GREENHALGH,

Medical Officer of Health.

Population.

The statistics contained in this Report are based upon a population of 45,775, which I estimate would be the population of the Borough at the middle of the year 1914.

A copy of the Census returns of 1911 appears below.

	DWELLINGS.			Buildings not used as Dwellings.	POPULATION.		
	Inhabited	Uninhabited	Building.		Males.	Females.	Persons.
West Ward.....	1280	23	1	57	2501	2962	5463
Central Ward	1334	28	1	433	2813	3059	5872
North Ward	1415	35	28	79	2791	3181	5972
Peel Park Ward.....	1577	27	8	91	3039	3484	6523
East Ward	1301	25	...	190	2593	2818	5411
South Ward	1368	15	9	62	2634	2955	5589
Higher Antley Ward	1098	22	9	60	2040	2288	4328
Spring Hill Ward ..	1315	20	4	54	2797	3074	5871
Accrington.....	10688	195	60	1026	21208	23821	45029

Census Year.	Population.	Increase in 10 years.	Inhabited Houses.	Increase in 10 years.	Average number of persons in each house
1881	31435	...	6396	...	4.9
1891	38603	7168	8155	1759	4.7
1901	43122	4519	9515	1360	4.5
1911	45029	1907	10688	1173	4.2

The following shows the number of new houses certified as fit for occupation during the year 1914, arranged according to the Wards in which they are situated.

West Ward	—
Central Ward	—
North Ward	65
Peel Park Ward	—
East Ward	11
South Ward	39
Higher Antley Ward	—
Spring Hill Ward	21

Area.—The area of the Borough, according to the last Ordnance Survey, is 3,426.6 acres, giving a density of 13 persons to the acre. The urban portion of the Borough has a considerably higher density than this, but cannot be estimated with accuracy.

Altitudes.—Altitudes at centre of Town and Boundaries.

	Feet above Sea Level.
Town Hall : Ordnance Bench Mark	441.60
Centre of Street opposite	439.00

Boundaries at :—

Blackburn Road (adjoining Church) :—

Bench Mark on Boundary Stone	413.00
Centre of Road opposite	412.19

Whalley Road (adjoining Altham) :—

Bench Mark on Boundary Stone	515.00
Centre of Road opposite	513.80

Burnley Road (adjoining Huncoat) :—

Bench Mark on Boundary Stone	563.00
Centre of Road opposite	562.04

Manchester Road (adjoining Baxenden Station) :—

Bench Mark on Boundary Stone	757.00
Centre of Road opposite	755.90

Datum : Mean High Water Mark at Liverpool.

Occupations.—The occupations of the people are of varied character. The staple industries are cotton weaving, cotton spinning, the manufacture of cotton spinning machinery, calico printing, and coal mining. Brickmaking is an industry carried on at several places on the outskirts of the Borough.

A large proportion of the female portion of the population finds employment in the cotton mills of the town.

Deaths.—586 deaths, 306 males and 280 females, have been registered in the Borough during the year, giving a crude death-rate equal to 12.80 per 1,000 of the estimated population per annum.

10 deaths were “uncertified” either by the Coroner or by a registered medical practitioner, 6 males, 4 females; 28 deaths, 20 males and 8 females, have been certified by the Coroner.

The Report from Mr. Townsend, the Cemetery Registrar, states that he has received for interment 45 infants who have not been born alive.

Death-Rate Corrected.—Arrangements have been made by the Registrar General for a list of births and deaths which have occurred outside the districts of their “fixed or usual residence” to be sent to their rightful district Medical Officers for inclusion in their statistics.

In the case of Accrington, this list amounts to 71 deaths and 4 births to be included, and 17 deaths excluded.

The total deaths appertaining to the Borough are as follows :—

Deaths occurring in Borough (excluding 26 in the Victoria Hospital, and excluding 6 other deaths of " Non-Residents ")	554
Deaths in Victoria Hospital	26
Less deaths of persons in Victoria Hospital residing outside the Borough (non-residents)	11
Deaths of Accrington residents in Victoria Hospital	— 15
Deaths of Accrington residents occurring outside the Borough, viz. :—	
Haslingden Union Workhouse, Pike Law..	44
Bolton	1
Blackburn	5
Blackpool	2
Burnley	1
Bilston	1
Church	1
Chorley	1
Chapel-en-le-Firth	1
Lancaster	6
Haslingden	1
Harrogate	1
Macclesfield	1
Prestwich	2
Southport	1
South Westmorland	1
Warrington	1
	— 71
	— 640

giving a corrected death-rate of 13.98 per 1,000 per annum, as against 14.21 for the year 1913.

The following were the death-rates for England and Wales during 1914 :—

England and Wales	13.6	per 1,000 living.
97 Great Towns (including London)	14.9	,
145 Small Towns	12.9	,
England and Wales (less the 242 Towns)	12.2	,
London	14.4	,

Accrington :—

Crude annual death-rate per 1,000	12.80
Corrected ,, ,, (including	
71 deaths outside the Borough, and excluding	
11 non-residents at the Victoria Hospital,	
and 6 others)	13.98
Births :— Males	467
Females	417
	—
	884
Deaths	640
	—
Excess of Births over deaths	244
Deaths of infants under 1 year of age	104
Giving an infant mortality per 1,000 births of ..	117.64

The following table gives the recorded death-rate for the last 24 years:—

Year.	Mortality per 1000.	Year.	Mortality per 1000.
1891	20.17	1903	14.83
1892	17.28	1904	15.96
1893	17.21	1905	13.62
1894	13.23	1906	13.63
1895	18.14	1907	14.94
1896	15.87	1908	14.85
1897	17.17	1909	15.19
1898	15.77	1910	13.37
1899	15.25	1911	15.77
1900	16.05	1912	11.77
1901	16.33	1913	14.21
1902	13.76	1914	13.98

The following table shows the seasonable distribution of deaths, including deaths of 71 Accrington "residents" occurring at Pike Law, etc., and excluding 11 deaths of "non-residents" in Victoria Hospital, and 6 others.

MONTH.	MALES.	FEMALES.	TOTAL.
January	30	25	55
February.....	29	22	51
March	35	33	68
April	31	28	59
May	26	26	52
June	27	32	59
July	22	21	43
August	36	14	50
September	25	22	47
October	21	25	46
November	25	20	45
December	36	29	65
	343	297	640

A Table similar to the following has appeared in a few previous reports, and I believe is of interest. I again insert it with the addition of the figures for 1914.

Year.	Total Deaths.	Certified as "Old Age."	All Causes Over 70.	All Causes Over 50.	Percentage Over 50.
1914	640	48	129	322	50%
1913	647	47	126	332	51%
1912	532	49	120	286	53%
1911	711	38	133	334	47%
1910	600	36	112	299	50%
1909	679	53	134	337	49%
1908	662	31	103	271	41%
1907	663	43	103	326	49%
1906	602	30	98	265	44%
	—3206	—193	—550	—1498	—46%
1905	599	30	84	251	42%
1904	699	31	106	286	41%
1903	647	32	79	254	39%
1902	598	31	90	264	44%
1901	706	39	89	267	37%
	—3249	—163	—448	—1322	—40%

Births.—884 births—467 males, 417 females—have been registered, giving a birth-rate equal to 19.31 per 1,000 per annum.

The birth-rates in 1914 for England and Wales were as follows :—

England and Wales	23.6	per 1,000 living.
97 Great Towns (including		
London) 24.9	"	
145 Smaller Towns	23.6	"
England and Wales (less the		
242 Towns)	21.9	"
London	24.6	"
Accrington	19.31	"

The birth-rate per 1,000 living, at all ages, for the last 24 years is shown below :—

Year.	Birth-Rate.	Year.	Birth-Rate.
1891	30.61	1903	22.14
1892	29.48	1904	22.90
1893	28.71	1905	21.08
1894	26.30	1906	22.09
1895	27.49	1907	23.17
1896	27.67	1908	22.71
1897	25.54	1909	21.16
1898	24.64	1910	20.63
1899	24.26	1911	17.57
1900	26.01	1912	18.75
1901	24.84	1913	19.63
1902	23.61	1914	19.31

The following table shows an analysis of the births allocated to the eight wards of the Borough ; the seasonable distribution as regards the month of the year in which they were registered and their sex ; the totals for the wards specify the legitimates and illegitimate. The populations estimated to the middle of the year are also given for each ward together with the death-rates, birth-rates and infant mortality rates, and also the same figures for the Borough as a whole.

BIRTHS REGISTERED, 1914.

MONTH	1914		West Ward	Central Ward	North Ward	Peel Park Ward	East Ward	South Ward	Higher Antley Ward.	Spring Hill Ward.	Whole Borough
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.
January	3	5	10	3	4	1	10	4	7	11	1
February	1	4	3	2	8	2	4	5	3	4	40
March	5	6	5	8	12	5	7	5	5	5	38
April	5	2	5	2	2	4	5	8	2	2	32
May	3	6	3	3	4	3	3	6	4	1	30
June	2	1	4	5	4	1	4	3	6	5	47
July	5	4	8	..	6	4	12	4	7	3	29
August	9	5	2	6	9	8	4	5	3	2	32
September	2	4	3	6	3	6	3	5	10	3	33
October	7	6	2	7	11	4	2	7	8	6	36
November	8	4	6	3	4	7	1	4	3	3	37
December	5	3	4	4	7	1	5	3	5	6	37
Workhouse .....	..	..	1	1	..	..	1	..	..	1	2
	55	50	56	50	74	45	60	51	70	57	48
TOTAL BIRTHS:											
Legitimate ..	101	105	101	105	106	113	119	102	125	127	88
Illegitimate ..	4	5	5	6	6	9	2	2	2	101	124
BIRTH-RATE . .	19.12	18.01	19.12	18.01	18.92	16.95	23.13	17.60	3	91	849
INFANT MORTALITY	85.71	169.81	92.43	63.06	110.23	108.91	109.89	112.90	120	124	35
DEATH-RATE . .	14.20	17.16	10.01	14.05	20.21	11.50	14.63	10.89	4	91	884
POPULATION . .	5491	5883	6288	6548	5490	5737	4372	5966	45775	5966	45775

STATEMENT shewing the number of Marriages within the Borough of Accrington
during the years 1904 to 1914.

	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914
Chapel Marriages, with the presence of the Registrar . .	136	117	116	121	119	101	118	101	106	99	111
Chapel Marriages, without the presence of the Registrar . .	2	49	195	61	75	66	68	87	83	76	74
Church Marriages	161	216	95	235	193	221	181	207	198	178	179
Register Office Marriages; the Man being resident in Accrington	24	23	32	30	27	26	30	26	23	26	19
	323	405	393	447	414	414	397	421	410	379	383

Natural Increase of Population.—The excess of births over deaths is 244. The corresponding figures for the last twenty-three years are :—

Year.	Increase.	Year.	Increase.
1892	438	1904	304
1893	456	1905	328
1894	525	1906	374
1895	380	1907	365
1896	485	1908	350
1897	348	1909	267
1898	372	1910	326
1899	382	1911	81
1900	426	1912	315
1901	368	1913	247
1902	428	1914	244
1903	319		

Infant Mortality.—This term means the number of deaths of infants under one year of age per 1,000 births registered during the year. There have been 884 births registered, and 104 deaths, which works out to an Infant Mortality of 117.64.

Table IV. gives a comprehensive analysis of the deaths.

The Notification of Births Act, 1907, became operative during the latter half of the year, but the date for adoption found the resources of the Health Office so taxed by a temporary period in which we were feeding necessitous children, (the need for which was brought about by a prolonged industrial strike at the great iron works of the town) that action had to be delayed. In the midst of this stress, war was declared, with the result that we were in a still less favourable position to carry out the provisions of the Act. Properly carried out, I believe this Act would

result in a great saving of infant life, and would be a great help and comfort to the mothers of infants. In January of 1915, Sister Munro was appointed temporarily to take up the duties of Miss Brodie, called away for Military Service. She is carrying out her duties, which are mainly those of School Nurse, in a thoroughly efficient manner, and from her training and inclination, we could wish no better lady to carry out the duties entailed by the Notification of Births Act.

Cards of instruction on the feeding of infants are given to certified midwives for distribution to houses where births occur, and are a great advantage in many cases. The experience of the doctors practising in the town, is that the proportion of the mothers who are able to feed their babies in the best, safest, and most natural way—at the breast—tends to become less, and the desire to escape this duty is not infrequently very pronounced.

The Infantile Death-rates for England and Wales during 1914, were as follows :—

England and Wales	105	per 1,000 Births.
97 Great Towns (including London)	113	,,
145 Smaller Towns	104	,,
England and Wales (less the 242 Towns)	93	,,
London	103	,,
Accrington	117	,,

For the last twenty-four years, the Infant Mortality has been :—

Year.	Mortality.	Year.	Mortality.
1891	151.8	1903	130.43
1892	138.0	1904	148.55
1893	190.3	1905	137.00
1894	122.0	1906	132.17
1895	192.3	1907	107.00
1896	171.4	1908	137.35
1897	187.38	1909	123.68
1898	201.15	1910	109.07
1899	178.98	1911	180.55
1900	143.75	1912	76.74
1901	159.21	1913	116.33
1902	130.60	1914	117.64

Zymotic Diseases. — The seven principal Zymotic Diseases have together caused 50 deaths giving a Zymotic death-rate of 1.09 ; Measles 26, Typhoid Fever 3, Zymotic Enteritis 1, Whooping Cough 11, Diphtheria 9, Small-pox and Scarlet Fever none.

We have no form of hospital isolation except for Small-pox, but we endeavour, by means of printed instructions carried by an assistant from the Health Office, to secure as good isolation as is possible at home, we can, of course, only use our influence in the cases of notifiable disease.

COMPARISON OF PREVALENCE OF SICKNESS AND DEATH
FROM INFECTIOUS DISEASES.

YEAR.	SMALLPOX		ERYSIPELAS.		Diphtheria & Membranous Group.		SCARLET FEVER.		ENTERIC FEVER.		PUERPERAL FEVER.	
	Cases reported	Deaths reported	Cases reported	Deaths reported	Cases reported	Deaths reported	Cases reported	Deaths reported	Cases reported	Deaths reported	Cases reported	Deaths reported
1895	..	..	..	..	31	17	163	9	178	13	1	..
1896	..	..	..	..	40	12	177	8	54	10	4	4
1897	..	..	..	..	32	15	328	9	48	5	5	4
1898	..	..	..	..	38	10	287	11	52	13	4	2
1899	1	..	..	..	..	..	398	10	35	4	2	..
1900	..	..	..	..	..	..	218	4	33	7	2	2
1901	..	..	..	..	..	..	154	9	25	8	5	4
1902	4	..	..	..	2	2	115	4	35	6	2	1
1903	43	1	..	6	3	29	6	275	21	24	8	1
1904	4	..	..	25	1	14	2	157	6	30	7	4
1905	35	1	..	42	2	20	7	84	4	29	6	5
1906	..	..	..	48	1	52	10	82	4	20	6	3
1907	..	..	..	29	..	45	9	85	3	22	8	4
1908	..	..	..	23	1	48	9	232	1	22	4	6
1909	..	..	..	30	3	24	7	180	..	15	8	4
1910	..	..	..	34	2	14	3	82	..	23	5	2
1911	..	..	..	42	3	25	9	94	5	15	8	4
1912	..	..	..	16	1	10	3	103	3	18	5	2
1913	..	..	..	28	..	15	7	123	2	22	6	2
1914	..	..	..	35	..	36	9	95	..	10	3	3

The number of deaths from the Principal Zymotic Diseases for the last 15 years is as under :—

DISEASES.	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914
Scarlet Fever	4	9	4	21	6	4	4	3	1	..	..	5	3	2	..
Measles	21	21	4	35	25	4	13	8	31	5	15	8	2	1	26
Enteric Fever	7	8	6	8	7	6	6	8	4	8	5	8	5	6	3
Zymotic Enteritis	29	32	3	11	10	5	18	4	19	4	6	31	2	10	1
Whooping Cough	13	4	16	1	14	..	12	6	19	8	6	28	1	5	11
Diphtheria															
Membranous Croup..	10	3	6	4	2	7	10	9	9	7	3	9	3	7	9
Smallpox .....	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..
	84	77	39	81	64	27	63	38	83	32	35	89	16	31	50

Scarlet Fever.—During the year, 95 cases of this disease have been notified, of which none have proved fatal. The notifications have come from the different wards as follows :—

	Borough.	W.	C.	N.	P.P.	E.	S.	H.A.	S.H.	
Cases notified .		95	9	13	11	7	7	32	8	8

In recent years the mortality from this disease has been slight, only 22 deaths have been recorded during the last 10 years, while Measles, which is not a notifiable disease, during the same period has caused 109 deaths, and Whooping Cough, another non-notifiable disease, has during the same period caused 92 deaths. I believe the fact of Measles and Whooping Cough being non-notifiable has fostered the belief that these diseases are less serious than Scarlet Fever, certainly less care is taken as regards isolation and the prevention of the spread than obtains in the case of Scarlet Fever. I believe that notification, and the control which follows it, has a salutary influence, and would lead to a reduction of the damage done by these two diseases.

Enteric Fever.—Typhoid Fever has been certified as the cause of three deaths out of 10 cases notified. The details as to wards are as follows :—

	Borough.	W.	C.	N.	P.P.	E.	S.	H.A.	S.H.	
Cases notified .		10	1	2	1	2	—	1	3	—
Deaths		3	—	1	1	—	—	—	1	—

This disease has been less in evidence this year than any year during the last twenty years, but its fatality has been very severe, three of the ten cases having proved fatal. In cases of this kind, a specially constructed galvanized iron pail is taken to the house for the reception of the dejecta, these are often asked for by the doctor as a precautionary measure, even before a certain diagnosis is made. The application of the Widal test is now much more frequently resorted to than in the past. Suitable outfits for carrying out the test are kept at the Health Office, and the microscopical work is done at the Public Health Laboratory, Manchester.

This table shews the number of cases of this disease notified and the deaths therefrom, since 1891 to the present time.

Period.	Notified.	Deaths.	Case mortality per cent.
1891 to 1895	298	38	12.7
1896 to 1900	222	39	17.5
1901 to 1905	143	35	24.4
1906 to 1910	102	31	30.4
1911	15	8	53.3
1912	18	5	27.7
1913	22	6	27.2
1914	10	3	30.0
	—	—	—
	830	165	19.8

Diphtheria.—36 cases of Diphtheria were notified during the year, and nine deaths have resulted therefrom. This disease has been much more prevalent than usual, three of the deaths were in children under four years of age, and the other six come in the age period 5 to 10 years. The details as to wards are as follows:—

Borough.	w.	c.	N.	P.P.	E.	S.	H.A.	S.H.	
Cases notified .	36	1	3	4	1	3	14	4	6
Deaths	9	—	—	1	—	1	3	3	1

A convenient outfit for taking throat swabs, and also a supply of anti-diphtheritic serum is kept at the Police Station, for the convenience of doctors called to attend cases of this disease. The Council defray the expense of the bacteriological examination of the throat swabs, and also undertake to consider the payment for serum used in households where expense might stand in the way of this valuable remedy. The efficacy of the serum is in proportion to its earliness of injection; after the first three days of the disease, its power is greatly diminished, after this period very large doses have to be used in order to produce satisfactory results.

In all cases an inspection of the house and drains is made immediately after receipt of notification.

Tuberculosis.—Tuberculous disease of all kinds has been responsible for 62 deaths, as against an average of 54 for the five preceding years. The death certificates indicate that 40 deaths were due to affections of the lungs, 14 to affections of the membrane of the brain, 7 to affections of the abdomen, and the remaining one to affections of other organs.

The following cases of Tuberculosis have been notified during the year :—

76 cases of Tuberculosis of the Lungs, and
33 cases of other forms of Tuberculosis.

Every case of Tuberculosis notified to me is sent on to Dr. McPhee, the Tuberculosis Officer for the district under the County Council. He visits the homes to see the patients and give advice as to prevention of the spread of the disease, and to select and arrange for the accommodation of those cases which would be most suitable for treatment in a Sanatorium. In this work he was for a part of the year assisted by a nurse, until military duties called her away. Although it is intended that the great advantage of free sanatorium treatment should be available to all suitable cases suffering from this disease, so far only patients who are insured persons under the National Insurance Act have received free sanatorium treatment. To give free sanatorium treatment to suitable non-insured sufferers, would entail a cost of 30/- per week on the Corporation, and at present no provision has been made to meet this need. The suitable treatment of all persons suffering from this disease is a great problem, but the prevention of others taking it is still greater, and since one great cause of the spread arises from careless spitting, I believe that a few prosecutions for this offence would have a very salutary influence in abolishing this very dangerous and disgusting practice.

I am indebted to Dr. McPhee for the following report of the Tuberculosis Dispensary work in the Borough during the year.

“SHERWOOD,”

GORSE ROAD,

BLACKBURN.

Tuberculosis.

The Lancashire County Council have established a Chief Dispensary at 39 Avenue Parade, Accrington. This is within three minutes' easy walk of the car terminus on the lines radiating to Clayton-le-Moors, Burnley Road, Baxenden, Church, and Oswaldtwistle, and serves these districts as well as the Borough of Accrington.

The premises consist of waiting rooms, dressing room, consulting room, laboratory, and office.

Dr. MacPhee, the County Tuberculosis Officer will attend on the following days: Tuesday, 10 a.m. to 12 noon, and Wednesday, 2 p.m., to 5 p.m. for the purpose of seeing patients.

It is desirable that patients be referred to the Dispensary by their own doctors.

The Dispensary is available for insured and non-insured patients, and its functions as defined in the Interim Report of the Departmental Committee on Tuberculosis are:—

1. Receiving house and centre of diagnosis.
2. Clearing house and centre of observation.
3. Centre for curative treatment.
4. Centre for examination of contacts.
5. Centre for “After care.”
6. Information bureau and educational centre.

Ordinary symptomatic treatment is not undertaken at the Dispensary if the patient is at the time receiving satisfactory treatment from a Medical Practitioner, but special forms of treatment may be undertaken if considered desirable.

The Tuberculosis Officer and his staff exercise general supervision over Domiciliary treatment, and acting in co-operation with the doctor in attendance, give special attention to the carrying out in conjunction with the Local Sanitary Authority of hygienic preventative measures.

For the latter purpose, and to assist in the general work of the Dispensary, the services of whole time Nurses are retained who visit the homes and instruct the patients in cleanliness and the necessary precautionary measures.

Sputum cups, handkerchiefs, etc., are supplied, and arrangements made for bacteriological examination of the sputum.

A copy of the Notifications of Tuberculosis received each week by the Medical Officer of Health is sent to the Tuberculosis Officer.

The patients' homes are visited by the Tuberculosis Officer or his nurse, and in this way, Sanitary defects prejudicial to the patient's recovery, and to the other members of the family, can be reported on by the Tuberculosis Officer, to the Medical Officer of Health, who will take such action as he may consider necessary.

It is felt that co-operation between the Medical Officer of Health and the Tuberculosis Officer is of the greatest importance, and every endeavour is being made to render it as effective as possible.

Owing to the war, Dr. MacPhee has been deprived of his assistant Tuberculosis Officer and his nurses, who undertook military duties, and it has been impossible to develop the Dispensary work according to the full County scheme.

During 1914, the number of insured persons who received treatment granted by the Lancashire Insurance Committee was as under :—

Domiciliary only	4
Domiciliary with special Nourishment....	6
Sanatorium, with Domiciliary	2
Sanatorium, Domiciliary with Special Nourishment	21
Sanatorium only	1
Hospital (Non-pulmonary)	1

One non-insured person received Sanatorium treatment under the temporary scheme of the Lancashire County Council for assisting non-insured persons to receive Institutional treatment.

By Domiciliary treatment is meant treatment in the patient's own home by his panel doctor under the general supervision of the Tuberculosis Officer. This treatment is granted by the District Insurance Committees who on the further recommendation of the Tuberculosis Officer may grant a small allowance of special nourishment such as Milk, Eggs, and Cream ancillary to the treatment.

Cancer.—Cancer has caused 49 deaths as against 37, 29, 48, 44, 45, and 48 for the preceding six years. The part of the body primarily afflicted in each case is shown in the big table of Causes of Death, at the end of the report.

Despite the very great amount of research work which is being carried out in our own and other countries, on the natural history of this affection ; its prevention and cure are yet shrouded in mystery. We know that it is a very widely spread disease, affecting all varieties of animals and even plants. 49 of the 620 deaths of the year have been due to this cause, a number nearly approaching that of Tuberculosis which caused 62 deaths. We are left to hope that the investigations of those who are devoting their lives to the elucidation of this terrible problem may soon be blessed with success.

Water Supply.—The quantity of water in the storage reservoirs at the commencement of the year, was 192 million gallons, a figure which is somewhat below what is usual at this time of the year. This coupled with the comparatively low rainfall during the early part of the year, rendered the possibility of a shortage in the supply not quite so remote as has been the case during the last few years. Advantage was taken of the excellent supply of water obtainable by pumping at Altham Bridge, 155 $\frac{3}{4}$ million gallons being pumped as against 104 $\frac{1}{2}$ million gallons last year. By mixing the water from this source with that from other sources, the degree of hardness has been kept at a consistently low level.

The total rainfall for the year amounted to 59.92 inches, rain falling on 208 days, as against 49.61 inches on 206 days during last year. The high total for the year is accounted for by the heavy rainfall during the months of November and December, 10.05 inches and 8.55 inches being registered during these months respectively—the average (for the last 10 years) for these two months is 4.41 inches and 4.52 inches. The heaviest rainfall during 24 hours, was on 11th February, 1914, when 2.25 inches fell, with 2.06 inches on the day following. There have been 8 days on which more than 1-in. of rainfall was registered.

The estimated quantity of water in the storage reservoirs on the 31st December, 1914, was 338 $\frac{7}{8}$ million gallons; a gain of 146 $\frac{7}{8}$ million gallons over last year.

Housing, etc.—The number of houses is, I believe adequate for the population; overcrowding seldom occurs, and prompt measures are taken in the few instances which come to notice; The details of the work done under the Housing and Town Planning Act will be found in the report of the Sanitary Inspector.

Disposal of Excrement.—The treatment of the sewage of the Borough together with that of the township of Church, is carried out at Copy Clough Works of the Accrington & Church Outfall Sewage Board ; where very extensive structural improvements are in process for the better and more economical treatment of the outfall.

An enumeration of the different forms of closet accommodation in the Borough is given in the Sanitary Inspector's report. The Waste Water Closet is far and away the most usual form of accommodation. In a community like Accrington, where the generality of the inhabitants attain a very high standard as regards hygiene and cleanliness, I am of opinion that Fresh Water Closets would be a better and healthier service, and therefore I would suggest that Waste Water Closets be discontinued in all new property.

Disinfecting Apparatus.—Our steam disinfecting apparatus is more than adequate for our needs, and continues to work satisfactorily.

Abattoirs.—The Public Abattoirs are regularly inspected, and are under the constant care of Mr. Walsh who resides on the premises.

Sale of Food and Drugs Act.—During the year 148 samples were purchased in the administration of the Food and Drugs Acts, of which the following are details:—

Articles Purchased.	Number analysed	FORMAL.		INFORMAL.		Refer. Number	Action taken.
		Genuine	Not Genuine	Genuine	Not Genuine		
Butter	14	7	..	7	..	..	..
Boric Acid Ointment	1	1	..	..	1	1045	No action taken.
Cream	1	..	..	4	..	..	..
Preserved Cream (bottles). .	5	1	..	..	..	..	..
Calomel Ointment	1	1	..	..	..	..	..
Cannphorated Oil	3	3	..	..	..	..	..
Gin	5	5	..	..	..	..	..
Gregory Powder	1	1	..	1	..	..	..
Milk	93	85	6	1	..	992 995 1001 1013 1019 1025	Fined £5 and £1 11 6 costs. Fined 5/- and £1 4 6 costs. Fined £3 and £2 3 4 costs. Fined £5 and £1 3 6 costs. Fined 10/- and £1 3 6 costs. No action taken (informal sample).
Milk of Sulphur	1	1	..	..	..	..	..
Mercury Ointment	1	1	..	..	..	..	..
Olive Oil	3	3	..	..	..	..	..
Rum	9	9	..	..	..	..	..
Sweet Spirits of Nitre	3	3	..	..	..	..	..
Whisky	7	7	..	..	..	..	..
Total	148	128	6	12	2	..	..

**PUBLIC HEALTH (MILK AND CREAM)
REGULATIONS, 1912.**

1.—Milk and Cream not sold as Preserved Cream.

	Number of samples examined for the presence of a preservative.	Number in which a preservative was reported to be present.
Milk	93	Nil.
Cream	1	1

The sample of Cream was taken unofficially, and the Analyst report was as follows :—

I am of opinion that the said sample is not a genuine sample of Cream, inasmuch as it contains a Boron preservative in amount equal to 0.09 per cent., or 6.3 grains per pound, expressed as Boric Acid.

The vendor was seen, and said that he had lately taken over the business, and did not know that preserved cream should be labelled. This explanation was accepted, and no further action was taken.

2.—Cream sold as Preserved Cream.

Instances in which samples have been submitted for analysis to ascertain if the statements on the label as to preservatives were correct.

Correct statements made	5
Statements incorrect	Nil.

Dairies, Cowsheds, and Milkshops.—The requirements of the regulations drawn up in the year 1901, under the Dairies, Cowsheds, and Milkshops Order, have with one exception been completed at all the farms now in occupation in the Borough, as regards lighting, air-space and means of ventilation. The farm buildings are now in a reasonably satisfactory condition, many of them leaving little to be desired. Limewashing twice a year is rigorously carried out and inspected by the Sanitary Inspector. The cows of the Borough are now kept under better conditions than in times past, and the advantage of free ventilation of the byres, is believed in by present day farmers in an increasing degree.

Factory and Workshops Acts.—Frequent visits are made to the Factories and Workshops to ascertain their condition as far as the matters under the supervision of the Local Authority are concerned.

Notifications under Sections 5 and 14 of the Factory and Workshop Act, 1901, have been received from H.M. Inspector, as follows :—

5 EAGLE STREET :—

“Front room requires limewashing.”
Front room limewashed.

194 BLACKBURN ROAD :—

“Limewashing overdue.” Last date, May 26th, 1913.
Limewashing attended to.

52 WILLOWS LANE :—

“Bakehouse requires limewashing.”
Bakehouse limewashed.

384 BLACKBURN ROAD :—

“Limewashing overdue.”
Limewashing attended to.

1 BISHOP STREET :—

“Bakehouse requires limewashing.”
Bakehouse limewashed.

13 WARNER STREET :—

“Workshop requires limewashing.”
Workshop limewashed.

106 BLACKBURN ROAD :—

“Two rooms in which the men are employed require limewashing.”
Rooms limewashed.

72 AVENUE PARADE :—

“ Limewashing overdue.” Last date, June, 1913.
Limewashing attended to.

VICTORIA MILL (WILLIAM SMITH & Co.) :—

“ The sanitary accommodation for women should be provided with inner doors and fastenings. (The outer door is also fastened back during the day so that privacy is not assured.) ”

Inner doors and fastenings provided.

CROFT STREET (T. SOUTHWORTH) :—

“ Water closet choked, and in a very dirty condition. There is also another closet (tub) which requires cleansing.” Matter attended to.

187 BLACKBURN ROAD :—

“ Walls and ceiling require cleansing.”
Walls and ceiling limewashed.

177 BLACKBURN ROAD :—

“ Bakehouse requires limewashing.”
Bakehouse limewashed.

44B BURNLEY ROAD :—

“ Closet requires limewashing.”
Closet limewashed.

KING STREET (J. S. ROYTON) :—

“ Walls and ceiling require limewashing.”
Walls and ceiling limewashed.

WINDSOR STREET (WALTER PHILLIPS) :—

“ No sanitary accommodation provided for females.”
Water closet provided.

ALBERT MILL, VICTORIA STREET (ALBERT MILL Co.) :—

“The outer wall of the mill in Victoria Street is apparently in a dangerous condition. The portion of the wall near the large doorway is bulging considerably, the inside showing cracks.”

Matter received attention.

WOODNOOK MILL (ACC. COTTON SPINNING & MAN. CO.) :—

“Insufficient means of escape in case of fire.”

Additional exit provided.

CROFT HOUSE (CO-OP. SOCIETY) :—

“Walls of workroom require cleansing.”

Workroom limewashed.

116A STANLEY STREET :—

“Walls, ceiling and floor of workshop require cleansing.” Workshop limewashed and cleansed.

ST. JAMES' STREET (HYDE BROS.) :—

“Closets require limewashing.”

Closets limewashed.

30 HIGHER ANTLEY STREET :—

“Limewashing of bakehouse overdue.”

Bakehouse limewashed.

ANTLEY, BLACKBURN ROAD (J. HEYES & SON) :—

“Water closet requires cleansing.”

Water closet limewashed.

MARKET PLACE (E. J. RILEY'S) :—

“Workshop requires cleansing.”

Workshop limewashed and cleansed.

MOSS LANE (HAMBLEDON MILL CO. LTD.) :—

“Insufficient sanitary accommodation, viz. :—6 W.C.'s for 180 females.”

Two additional Closets provided.

The following is a more detailed list of the various Workshops in the Borough :—

Bakers, Confectioners, etc.	43
Dressmakers, Milliners, etc.	68
Tailors	29
Bootmakers, Cloggers, etc.	38
Hosiers	3
Brush-maker	1
Harness-makers	4
Cycle Motor Repairers	2
Cabinet-makers, Joiners, etc.	14
Basket-maker	1
Fent Sorters	2
French Polishers, Upholsterers	6
Plumbers	7
Painters	5
Masons	2
Smiths	7
Wheelwrights, Coach Builders	4
Electrical Engineers	2
Hot Water Engineer	1
Picture Framers	3
Jewellers	5
Photographers	3
Sugar Boilers	1
Coopers	2
Tinsmiths	2
Chemical Manufacturers	4
Paper Bag Makers	2
Rag Sorters	2
Beer Bottler	1
Soap and Boiler Compo Makers	2
Sauce Maker	1
Fish Curers	2
Tripe Boilers	6
Gut Scraper	1
Piano Repairer	1
Christmas Card Dealer	1
Polish Maker	1
Florists	3
Weighing Instrument Repairer	1
Gas and Water Meter Repairer	1
Ropemaker	1
	—
	285
	—
Factories	155
Cotton Cloth Factories	29

The following is a copy of the official form required by the Home Office as to the proceedings taken in connection with the supervision of Factories, Workshops, etc.

I.—INSPECTION.

INCLUDING INSPECTIONS MADE BY SANITARY INSPECTORS OR INSPECTORS OF NUISANCES.

PREMISES.	Number of		
	Inspections.	Written Notices.	Prosecutions.
FACTORIES	10	..	..
(Including Factory Laundries).			
WORKSHOPS	50	6	..
(Including Workshop Laundries)			
WORKPLACES	19	..	..
TOTAL	79	6	..

2.—DEFECTS FOUND.

PARTICULARS.	Number of Defects			
	Found.	Remedied.	Referred to H.M. Inspector.	Number of Prosecutions.
Nuisances under the Public Health Acts :—				
Want of Cleanliness.....	8	8	..	..
Want of Ventilation .....	..	..	..	..
Overcrowding .....	..	..	..	..
Want of Drainage of Floors .....	..	..	..	..
Other Nuisances	4	4	..	..
Sanitary accommodation	Insufficient Unsuitable or Defective .. Not separate for sexes ..	2	2	..
		1	1	..
	
Offences under the Factory and Workshop Act :—				
Illegal occupation of underground Bakehouse (S. 101) .....	..	..	..	..
Breach of Special Sanitary requirements for Bakehouses (SS. 97 to 100)	7	7	..	..
Other offences	2	2	..	..
TOTAL	24	24	..	..

CLASS.	NUMBER.		
	Lists	Outwk's Contractors	Work men
3.—HOME WORK.			
Lists of Outworkers, (Section 107) :—			
Lists received : Twice in the year	24	5	28
,, Once in the year .....	..	..	..
Addresses of Outworkers forwarded to other Councils .....	..		9
,, „ received from „ .....	..		..
Number of Inspections of Outworkers' Premises .....	..		32
Outwork in Unwholesome Premises (Sec. 108) :—			
Instances			
Notices served			
4.—REGISTERED WORKSHOPS.			
Workshops on the Register (S. 131) at the end of the year.			
Important classes of workshops, such as workshop bakeries, may be enumerated here. {	Bakers, Confectioners		43
	Dressmakers, Milliners, &c.		68
	Tailors, &c.		29
	Cloggers, Bootmakers, &c.		38
	Other Workshops		107
	Total number of Workshops on Register		285
5.—OTHER MATTERS.			
Matters notified to H.M. Inspector of Factories :—			
Failure to affix Abstract of the Factory and Workshop Act (S. 133) .....			..
Action taken in matters referred by H.M. Inspector as remediable under the Public Health Acts, but not under the Factory and Workshop Act (S. 5)	Notified by H.M. Inspector .. Reports (of action taken) sent to H.M. Inspector	24	24
Other .....			..
Underground Bakehouses (S. 101) :—			
Certificates granted during the year .....			..
In use at the end of the year			7

Table showing Birth and Death Rates in certain Towns in 1914.

NAME.	Population.	Birth Rate.	Death Rate.	Zymotic Death Rate.	Respiratory Death Rate.	Deaths per 1000 Births.	Deaths from other forms of Tuberculosis.	Malignant Disease Death Rate.	Average Death Rate for the last 10 years.
Ashton-under-Lyne	45179	23.7	18.2	3.3	3.8	1.2	.4	.7	17.6
Blackburn	134323	20.8	16.1	116	3.3	.92	.22	.99	..
Blackpool	66364	14.47	13.76	110	.4	2.0	1.04	1.41	13.29
Burnley	110040	23.5	16.4	158	1.9	3.8	1.02	.20	17.15
Burton-on-Trent	48000	21.79	13.14	90	..	1.98	1.10	.29	1.08
Bury	52530	23.0	15.5	122.4	.9	1.8	1.5	.6	..
Carlisle	12850	20.3	11.8	107	.62	2.1	.54	1.5	..
Clitheroe	45946	22.4	12.2	89	.69	..	.73	.20	..
Crewe . . . . .	..	..	..	..	..	..	..	..	13.9
Darwen	44230	19.67	14.37	113	1.37	2.17	1.0	.4	.94
Keighley	38593	20.49	13.19	86	.46	..	1.39	.32	.93
Lancaster	41500	16.9	11.4	122	1.1	2.2	.62	.24	.65
Nelson	14130	22.08	15.28	141	1.62	3.74	.56	.14	.85
Padham . . . . .	..	..	..	..	..	..	..	..	..
Southport	92868	29.18	17.09	139	2.38	4.13	.95	.31	.64
Wigan	7050	19.29	16.60	147	1.41	3.26	.85	..	17.32
Church	9200	23.	15.	117	1.6	3.7	1.0	.3	.79
Clayton-le-Moors	16210	22.27	15.73	144	1.41	2.89	.92	.12	14.6
Oswaldtwistle	45775	19.31	13.98	117	1.09	2.40	.87	.48	15.09
Accrington . . . . .	..	..	..	..	..	..	..	..	14.13

TABLE (C).

COUNTY OF LANCASTER.

SUMMARY OF MEDICAL OFFICER'S REPORT FOR 1914.

BOROUGH OF ACCRINGTON.

Medical Officer of Health, ARTHUR GREENHALGH. Salary as M.O.H., £100.

Inspector of Nuisances, RICHARD DIGGLE. Salary as Inspector, £225.

What is the character of the Hospital Accommodation?—For Small-pox: Corrugated iron building. For other Infectious Diseases:—

Is it Joint or otherwise?—Belongs to Accrington.

Number of Beds available for your District?—For Small-pox, 24. For other Infectious Diseases,—

Deaths in Hospital of patients removed from your District. From what causes?

How is Disinfection carried out?—Houses, Formalin fumigation and spray. No. of Houses disinfected?—235. Apparatus used for Clothing, Bedding, etc., (steam or otherwise)?—Steam (Goddard, Massey, & Warner). Where is apparatus situated?—Hyndburn Road Depot (within the district).

Are any Diseases not specifically mentioned in the Infectious Diseases Notification Act notifiable (for instance, Measles, Whooping Cough, Diarrhoea, Chicken Pox, etc.)? If so, what are they?

Diseases specially prevalent? Period?

Number of times School Closure adopted? For what disease?

Number of Special Reparts made under Art. XIX. (15 and 16) Sanitary Officers' Order, 1910?

Bacteriological Examinations. Specimens examined—Blood, 4; Swabs, 4; Sputum, 4; Milk,—; Others,—.

Arrangement (if any) made under the Diphtheria Anti-toxin Order, 1910?—Supply of serum kept at Police Station.

"The Housing of the Working Classes Acts, 1890 to 1909."—Has your Authority determined the procedure to be adopted for the inspection of your District as required by Article 1 of the Regulations?—Yes. Has your Authority prepared, as required by Article 1 (3), a list of dwelling-houses, the early inspection of which is desirable?—Yes. Has your Authority designated an officer to undertake the special inspection of houses and to keep the records stipulated by Article 2. If so, what officer?—Inspector of Nuisances. Have the necessary books, forms, &c., for keeping the required records been obtained?—Yes.

Action taken in 1914 :—No. of Dwelling-houses inspected under Sec. 17 of the Act of 1909 ?—155. No. of Dwelling-houses considered unfit for human habitation ?—3. No. of Representations to Authority with a view to making Closing Orders.— No. of Closing Orders made ?—3. No. of Dwelling-houses in which defects were remedied without making Closing Orders ?—117. No. of Dwelling-houses put into a fit state of habitation after making Closing Orders ?—2. No. of Dwelling-houses demolished ?—3. General character of defects found to exist ?—See Inspector's report. Is there a deficiency of housing accommodation ?—If so, where, and to what extent ?—No appreciable deficiency. Number of New Houses built during 1914 : By and at the cost of the District Council ?—By private enterprise ?—136.

Source of the Water Supply.—Dean Clough, Mitchell's, and Burnley Road Reservoirs in addition to a copious supply of deep well water from Altham. What is its condition ?—Good. Possibilities of contamination ?—Nil. Any insufficiency, and where ?—Nil.

Is Scavenging and Removal of House Refuse carried out satisfactorily for whole of district ?—Yes. How performed (state whether by Sanitary Authority, Contract, or Occupiers of Houses) ?—Sanitary Authority.

How is the Refuse disposed of ? Has a Destructor been provided ?—Yes. Horsfall's 6-cell Destructors.

Sewage Disposal Works. Method of Treatment ?—Bacterial filter beds. What is the character of the Drainage System ?—Any developments during year ?—Good. New Sewer for Green-Haworth district. Areas, or Townships, without proper drainage system ?—Higher Baxenden. Action taken—Drain testing, Flushing, &c. ?—Drains tested with smoke.

Action taken with regard to the Pollution of Streams ?—None.

Canal Boats: Number Inspected ?—

What is the condition of the Bakehouses ?—Good.

What is the condition of the Slaughter Houses ?—Good. Has a Public Abattoir been provided ?—Yes.

What is the condition of the Lodging Houses ?—Fair. Are they Registered ?—Yes.

What is the Sanitary condition of the Schools ?—Good.

Dairies, Cowsheds, and Milkshops—Are they periodically inspected ?—Yes. What is their condition ?—With one or two exceptions, very good.

Have Regulations been made under the Order of the L.G.B. ?—Yes. Are they enforced ?—Yes.

Amount of air space in cubic feet required for each cow ?—600 cubic feet.

No. of Cowkeepers ?—52 No. on Register ? No. of inspections during year ?—104.

No. of Dairymen or Purveyors of Milk (other than Cowkeepers) ?—No. on Register ?—107.

Any arrangements for veterinary inspection of dairy cows ?—Veterinary inspector appointed to examine all milch cows.

Action taken (if any) as to tuberculous milk?—None.

Total amount of Food seized as unfit for Human Consumption?—
7,832 lbs. of Beef; 17 sets of organs; 428 lbs. of Pork; 44 lbs. of Udders; 42 lbs. of Fish; 11 couples of Rabbits; 1,490-lbs. of Strawberries; 1,012 lbs. of Potatoes.

No. of Carcasses and parts of Carcasses condemned for Tuberculosis?—
—17. No. of Legal Proceedings, and result?

Department of Inspector of Nuisances.—No. of Notices served?—
381. Nuisances remedied?—333. No. of Legal Proceedings taken and result?

Closet Accommodation of the District—

No. of Privy Middens?—28 (including Farms).

Pail Closets?—1035.

Fresh Water Closets?—1212

Waste Water Closets?—9209.

No. of Privy Middens converted during 1914?—To W.C.'s 2;
To Pails, &c.

No. of Pail Closets converted to W.C.'s?—30.

Does Council contribute towards the cost of conversion of either privies or pail closets, or both? If so, how much?—
Pails—Half cost; usually about £2 per closet.

What kind of closet accommodation is being provided for New property?—Waste Water Closet.

Smoke—

No. of Observations?—11.

No. of Legal Proceedings taken and result?—

What is the time limit allowed for the emission of black smoke per hour?—3 minutes for 1 boiler; 5 minutes for 2 boilers; 7 minutes for 3 boilers.

Has the Authority adopted—

“The Infectious Disease (Prevention) Act, 1890”?—Yes.

“The Public Health Acts Amendment Act, 1890”?—Yes.

“The Public Health Acts Amendment Act, 1907”?—No.

“The Notification of Births Act, 1907”?—Yes.

Has a Health Visitor (whole, or part-time) been appointed?—
Yes (whole time).

Has any, and if so, what action been taken respecting Child Welfare Work?—No. Adoption of Notification of Births' Act, but not yet carried out.

Notable Sanitary Improvements during 1914?—Provision made for draining Green Haworth district.

Chief Sanitary requirements of District?—A discontinuance of the Waste Water Closet, and the adoption of the Fresh Water System. A separate ashbin for each house.

LOCAL GOVERNMENT BOARD RETURN.

1914.

TABLE I.—For Whole District.

YEAR.	BIRTHS,			TOTAL DEATHS REGISTERED IN THE DISTRICT.			TRANSFERABLE DEATHS.			NETT DEATHS BELONGING TO THE DISTRICT.		
	Uncorrected Number.	Nett. Number	Rate.	Number	Rate.	Number	of Non-residents not registered in the District.	Under 1 Year of Age.	Number	Rate per 1,000 Nett Births.	Number	Rate.
1909	2	3	4	5	6	7	8	9	10	11	12	13
1910	44699	946		648	14.49	17	48	117		679		15.19
1911	44875	926		566	12.61	9	43	101		600		13.37
1912	45075	785	79.2	15.57	681	15.10	16	46	143	180.55	711	15.77
1913	45175	842	84.7	18.75	499	11.04	12	45	65	76.74	532	11.77
1914	45175	880	884	19.31	586	12.80	17	71	104	117.64	640	12.98

Notes.—This Table is arranged to show the gross births and deaths in the district, and the births and deaths properly belonging to it with the corresponding rates. For years before 1911 some of the corrected rates are not available. The rates are calculated per 1000 of the estimated gross population.

* In Column 6 are included the whole of the deaths registered during the year as having actually occurred within the district.

In Column 12 is entered the number in Column 6, corrected by subtraction of the number in Column 8 and by addition of the number in Column 9. Deaths in Column 10 are similarly corrected by subtraction of the deaths under 1, included in the number given in Column 8, and by addition of the deaths under 1 included in the number given in Column 9.

Area of District in acres (exclusive of area covered by water) 3426.6

Total population at all ages 45,029
Number of inhabited houses 10,688
Average number of persons per house 4.2

{ At Census of 1911.

LOCAL GOVERNMENT BOARD RETURN.
 Table II.—Cases of Infectious Disease notified during the Year 1914.

NOTIFIABLE DISEASE	At all Ages	NUMBER OF CASES NOTIFIED.						TOTAL CASES NOTIFIED IN EACH LOCALITY (e.g. Parish or Ward) of the District.					
		Under 1	1 to 5	5 to 15	15 to 25	25 to 45	45 to 65 and upw'd	West Ward.	C'ntr'l Ward.	North Ward.	Peel Park Ward.	East Ward.	South Antley Hill Ward.
Diphtheria (including Membranous croup)...	36	1	7	22	3	3	..	1	3	4	1	3	14
Erysipelas	35	..	1	..	5	12	15	2	4	5	3	6	4
Scarlet fever	95	..	14	68	9	4	..	9	13	11	7	7	3
Enteric fever	10	..	..	5	3	2	..	1	2	1	2	..	3
Puerperal fever	3	..	..	..	..	3	..	..	1	..	..	1	..
Cerebro-Spinal Meningitis.....	..	..	..	..	..	..	..	..	..	..	..	..	..
Poliomyelitis .....	..	..	..	..	..	..	..	..	..	..	..	..	..
Ophthalmia Neonatorum	2	..	..	..	..	..	..	2	..	..	..	..	..
Pulmonary Tuberculosis	76	..	1	10	16	35	13	1	7	11	8	8	10
Other forms of Tuberculosis	33	..	..	4	20	5	2	..	3	6	5	6	3
Totals	290	3	27	125	41	61	30	3	27	41	32	32	65

Isolation Hospital—Name and Situation : For treatment of Small-pox only. Total available beds :—

LOCAL GOVERNMENT BOARD RETURN.

TABLE III.—Causes of, and Ages at Death during the Year 1914.

CAUSES OF DEATH.		NETT DEATHS AT THE SUBJOINED AGES OF "RESIDENTS" WHETHER OCCURRING WITHIN OR WITHOUT THE DISTRICT.										Total Deaths whether of "Residents" or "Non- Residents" in Institutions in the District 11		
		All Ages 2	Under 1 year 3	1 and under 2 years 4	2 and under 5 years 5	5 and under 15 yrs. 6	15 and under 25 yrs. 7	25 and under 45 yrs. 8	45 and under 65 yrs. 9	65 and up- wards 10	166	175		
All causes:	Certified Uncertified	630 10	101 3	32 2	30 2	21 1	22 2	83 1	166 2	175 2	166	175	166	175
1	Enteric Fever	3	..	..	..	..	..	..	..	..	..	..	..	..
2	Smallpox	26	5	11	10	..	..	..	..	..	..	..	..	..
3	Measles .....	..	..	..	..	..	..	..	..	..	..	..	..	..
4	Scarlet Fever	11	3	5	2	..	..	..	..	..	..	..	..	..
5	Whooping Cough	9	1	2	6	..	..	..	..	..	..	..	..	..
6	Diphtheria and Croup	8	..	..	..	..	..	..	..	..	..	..	..	..
7	Influenza .....	..	..	..	..	..	..	..	..	..	..	..	..	..
8	Erysipelas .....	..	..	..	..	..	..	..	..	..	..	..	..	..
9	Phthisis (Pulmonary Tuberculosis)	40	..	..	2	1	5	15	13	4	..	..	..	..
10	Tuberculous Meningitis	14	5	2	3	3	1	..	..	..	..	..	..	..
11	Other Tuberculous Diseases	8	3	..	1	..	..	..	2	2	..	..	..	..
12	Cancer, malignant disease	49	..	..	..	..	..	..	..	5	27	2	..	..
13	Rheumatic Fever	6	..	..	..	2	..	..	..	2	..	..	..	..
14	Meningitis	6	2	..	3	1	..	..	..	..	..	..	..	..
15	Organic Heart Disease	51	..	..	..	1	2	..	8	25	15	..	..	..
16	Bronchitis (all forms)	53	10	1	1	1	..	..	2	14	24	..	..	..
17	Other diseases of Respiratory Organs	50	4	4	6	3	6	11	5	11	5	1	..	..
18	Diarrhoea and Enteritis	7	..	1	..	..	..	..	3	2	1	..	..	..
19	Appendicitis and Typhlitis	17	11	1	..	..	..	..	1	2	2	..	..	..
20	Cirrhosis of Liver	1	..	..	..	..	..	..	..	..	..	..	..	2
21	Alcoholism	3	..	..	..	..	..	..	..	..	2	1	..	..
21A	Nephritis and Bright's Disease .....	..	..	..	..	..	..	..	..	..	..	..	..	..
22	Puerperal Fever	19	..	..	..	..	..	..	2	4	12	1	..	..
23	Other accidents and diseases of Pregnancy and Parturition	1	..	..	..	..	..	..	1	..	..	..	..	1
24	Congenital Debility and Malformation, including Premature Birth	5	..	..	..	..	..	..	1	4	..	..	..	2
25	Violent Deaths, excluding suicide	42	42	..	..	..	..	..	..	..	..	..	..	..
26	Suicide	6	..	..	1	2	..	..	1	6	3	7	..	..
27	Other defined Diseases	177	16	6	..	..	..	..	3	18	2	..	46	88
28	Diseases ill-defined or unknown	15	3	..	1	..	..	..	3	5	3	2	..	..
29	Totals	640	104	32	32	21	23	83	168	177	26	..	..	..

Deaths of Accrington Residents from all Causes during 1914

(Classified in accordance with the MANUAL OF THE INTERNATIONAL LIST OF CAUSES OF DEATH, as prepared by the Registrar-General).

Chart shewing Death rates, Birth rates, and Infantile Mortality rates, from 1891-1914.

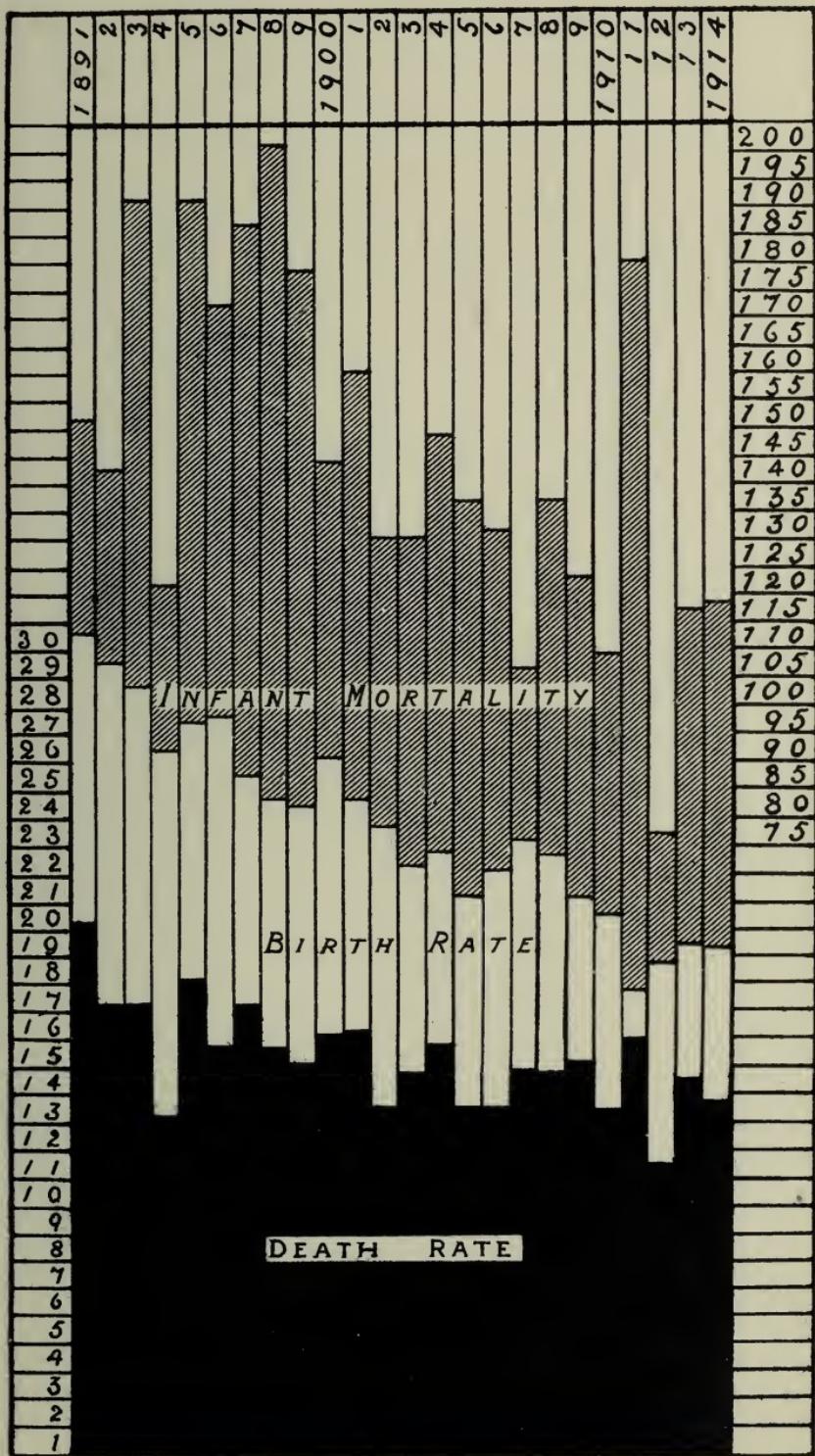


TABLE IV.

INFANT MORTALITY.
NETT DEATHS FROM STATED CAUSES AT VARIOUS AGES UNDER ONE YEAR OF AGE,

CAUSE OF DEATH.	All Causes		Certified		Uncertified		Under 1 week.		1-2 weeks.		2-3 weeks.		3-4 weeks.		Total under 1 month.		Total Deaths under 1 year.		Wards.		
Measles	24	3	7	2	..	..	..	..	..	..	..	..	..	..	36	24	20	15	6	101	9
Scarlet Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping Cough	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diphtheria and Croup	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Erysipelas	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tuberculous Meningitis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Abdominal Tuberculosis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Other Tuberculous Diseases	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Meningitis (not Tuberculous)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Convulsions	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Laryngitis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bronchitis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pneumonia (all forms)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diarrhoea	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Enteritis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gastritis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Syphilis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Rickets	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Suffocation, overlying	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Injury at Birth	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Atelectasis	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Congenital Malformations	..	..	2	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..
Premature Birth	16	2	..	2	..	..	..	..	20	1	..	..	..	..	..	..	..	..	..	..	..
Atrophy, Debility & Marasmus.	4	..	2	..	..	..	..	..	6	10	1	..	..	..	..	..	..	..	..	..	..
Other Causes	3	..	..	..	..	..	..	..	3	1	4	1	..	..	..	..	..	..	..	..	..
	27	3	7	2	39	24	20	15	6	104	9	18	11	7	24	11	10	14			
Nett Births in the year	Legitimate		849		Illegitimate		..		Nett Deaths in the year of		Legitimate Infants		..		101		Illegitimate Infants		..		3

Public Health Department.

ANNUAL REPORT

OF THE

Chief Sanitary Inspector

For the Year 1914.

RICHARD DIGGLE, Assoc. Royal San. Inst.,
Chief Sanitary Inspector.

PUBLIC HEALTH DEPARTMENT,
TOWN HALL,
ACCRINGTON.

To the Sanitary Authority
of the Borough of Accrington.

GENTLEMEN,

I have the honour to submit to you my SIXTEENTH ANNUAL REPORT, giving particulars of the work done by this Department during the year 1914.

As in previous years the inspections have been carried out principally in districts where insanitary conditions were known to exist; and have been dealt with under the provisions of the various Health Acts and Bye-laws in force.

**Inspections under the Housing and Town Planning
Act, 1909.**

155 houses in the following districts have been inspected.

Marquis Street	1
Baxenden Fold	2
Willows Lane	4
Eden Street	1
Richmond Hill Street	1
Crawshaw Street	19
Cunliffe Street	8
Cobden Street	4
Mason Street	9
Lune Court	1
Robert Nuttall Street	36
Cotton Street	6
Henry Street	3
Worsley Street	18
Bramley Street	2
Hannah Street	4
Holden Street	1
Dale Street	15
Grant Street	1
Law Street	6
Plantation Street	7
Agnes Street	4
Bamford Street	2

As a result of these inspections, many improvements have been effected, and the following include some of the most important, viz. :—

At the property in Law Street, two houses (back to back) on account of the position, were deficient in light and ventilation, and altogether unfit for human habitation. I conferred with the owner, and suggested the following alterations: To make the two houses into one, and set back the gable of the back house to increase the light and ventilation, the reconstruction of the closet and ashpit, etc. The work has been carried out, and a satisfactory improvement made.

In the same locality, 11 houses in Plantation Street and Agnes Street are very insanitary, two are back to back, and the others badly lighted, and the sanitary conveniences are in a bad condition. A plan and specification has been prepared, and tenders obtained. Some little difficulty has arisen to prevent the alterations from being carried out, but it is possible that the same will be overcome, and the work carried out during the coming year.

A very desirable improvement has been made in Higher Pitt Street and Birtwistle Street. The property in this district was very congested and deficient in ventilation. The matter was referred to the General Works Committee, who decided to purchase five houses; three of the houses have been demolished, and a roadway opened out between Pitt Street and Birtwistle Street, an improvement which will no doubt, have a beneficial effect on the health of the people living in the immediate locality.

The following is a summary of the work done under this heading :—

Number of houses Inspected	155
,, Satisfactory	38
,, Not kept in a reasonable condition, on which notices have been served	117
,, In which the ordered work is completed	92
,, In which the ordered work is in progress or in hand....	60
,, Closed as unfit for habitation	3
,, Demolished	4
,, Overcrowded	1
,, With 3 rooms	5
,, ,, 4 ,,	127
,, ,, 5 ,,	12
,, ,, 6 ,, and over	11
,, ,, Town's water closets ..	22
,, ,, Waste water closets....	57
,, ,, Pail closets	76
,, ,, Ashpits (separate)	7
,, ,, ,, (joint)	57
,, ,, Ash-tubs	54
,, ,, Ashbins (loose)	30
,, ,, ,, (fixed)	7
,, ,, Baths	2
Average number of persons per house	4.5

Summary of defects found.

Defective Slop sinks	3
,, Slop pipes	11
,, Flagged floors	14
,, Wood floors	17
,, Stairs or stairs rails	9
,, Doors	1
,, Other woodwork	7
,, Chimneys	1
,, Fire ranges	4
,, Plastering	18

Defects causing dampness :—

Roofs	14
Troughing	9
Rain water pipes	4
Other causes	11

Lighting and ventilation :—

Insufficient light	3
Windows fast sheets	11
,, cords broken	24

Defective Pail closets	74
,, Town's water closets	21
,, Drains	19
,, Yard flagging	19
,, Outbuildings	2
,, Ashpits	14
,, , doors and fastenings	1
,, Ashbins	23
,, Division walls	1
Accumulation of rubbish in yard	2
Number of houses dirty	3
,, verminous	3
,, overcrowded	1
,, unfit for habitation	3

Nuisances, etc.

In addition to the work done under the Housing and Town Planning Act, other matters have been remedied, including :—

Insanitary pail closets	74
Defective drainage	24
Defective tippers, etc., to W. W. C's..	69
Defective rain water pipes	4
Defective street gullies	4
Defective waste pipes	11
Defective ashpit doors, etc.	7
Accumulations of manure	38
Ashes bins renewed	31
Houses overcrowded	1
Houses dirty	4
Stables dirty	2
Choked W.W.C.'s and drains (opened by Corporation workmen).....	1701

Sanitary Conveniences.

The approximate number of each type are as follows :—

Fresh Water Closets.	Waste Water Closets.	Pail Closets.
1212	9209	1035

The fresh water closets give very little trouble, although it does happen that careless tenants often neglect to pay proper attention as regards cleanliness.

Of the 9,209 waste water closets, 1,701 have been blocked, and attended to ; this is a matter which I desire to call special attention to. The blockages were found to be caused by accumulations of paper over the trap, or brushes, cloths, tins, etc., having been accidentally thrown down with slop water, etc.

In order to induce tenants to report immediately, these obstructions are removed free of charge, by a workman employed by the Corporation. Careless tenants often neglect this duty, and as a consequence, nuisances are frequently caused which are difficult to remedy.

Faulty or broken tippers were responsible for 61 blockages, in only 14 cases was it found necessary to open the ground to remove the cause of obstruction, and in each case faulty drain connections were found to be the cause.

The pails in connection with pail closets are changed and washed weekly, and few complaints have been made in respect to the system, or neglect on the part of the Corporation workmen.

Factory and Workshop Acts.

The inspections of Workshops have been carried out as in previous years, 24 complaints have been received from H.M. Inspector of Factories, regarding defects in workshops, etc., but none of these were of a serious character. The full particulars of this work will be found in the Medical Officer of Health's portion of the report.

Diseases of Animals Acts.

The provision of these Acts, so far as relate to this Department, have been given the attention required.

Proceedings were taken in June against a butcher for failing to report having in his possession a cow suffering from Tuberculosis. The case was, however, dismissed.

Dairies, Cowsheds, and Milkshops Order.

The whole of the Cowsheds in the Borough have been visited at least twice during the year, and the premises were found to be kept in a fairly satisfactory condition.

Notices were sent to every farmer in April and September calling attention to the requirements as regards lime-washing, etc., and in every case the requirements were carried out.

Disinfection.

The following cases of Infectious Diseases were notified during the year :—

Scarlet Fever	95
Diphtheria	36
Typhoid Fever	10
Puerperal Fever	3
Erysipelas	35
Ophthalmia Neonatorum	2
Pulmonary Tuberculosis	76
Other forms of Tuberculosis	33

Each case was visited, and instructions given as to the necessary precautions to be taken to prevent the spreading of the disease. After the recovery, or death, of the patients, the houses were disinfected with formaldehyde, and the bedding, clothing, etc., taken away and treated in the steam disinfecter.

235 rooms, 1,353 articles of clothing and bedding, 31 books, and 16 schools were disinfected, and 328 articles of clothing and bedding destroyed.

School Inspection.

The Elementary Day Schools have been frequently inspected, and the sanitary conditions found to be satisfactory. During the Easter and August holidays all are thoroughly cleansed, the walls, etc., swept down, and all furniture and floors, etc., washed.

Slaughter Houses and Markets.

The Slaughter Houses and Markets have been kept under constant observation, and the following is a summary of the food destroyed as unfit for sale :—

7,832-lbs. of Beef, 17 sets of organs, 428-lbs. of Pork, 44-lbs. of Udders, 42-lbs. of Fish, 11 couples of Rabbits, 1,490-lbs. of Strawberries, and 1,012-lbs. of Potatoes.

During the year, 2,244 beasts, 324 calves, 17,995 sheep, and 540 pigs have been slaughtered at the Corporation Abattoirs.

Offensive Trades.

The premises used for offensive trades are regularly inspected, and the businesses have been conducted during the year without any complaints being made.

Common Lodging Houses.

The three Lodging Houses have been inspected weekly, and the premises are fairly well conducted, and kept in accordance with the Bye-laws, and without any cause for complaint.

Smoke Nuisance.

Since August the Mills have been running short time on account of the War. Consequently less smoke has been emitted from the factory chimneys, and less need for supervision. In several cases the Mill owners have made improvements by having mechanical stokers fixed to their boilers.

11 observations were taken during the year, and only one exceeded the time limit. On making enquiries, a satisfactory explanation was made.

Stable Manure and House Flies.

It is well known that stables and manure pits are the chief breeding places of the house fly, and from personal observations, I have seen houses in the vicinity of stables so infested with the disgusting pest as to make them unfit for habitation.

In April, an attempt was made to prevent the nuisance, a survey was made of all the manure pits, and notices were served on the owners, requiring the manure to be removed at least once in seven days.

With the object of creating public interest, a small pamphlet, "The House Fly as a danger to Health," issued by the Natural History Department of the British Museum, was sent to all horse owners, and handbills were distributed from house to house, the result of which proved most encouraging. Many districts which in previous years, were infested with the pest, have shown marked improvement, and horse owners have realised the importance of our efforts, and have shown a willingness to comply with the bye-law. And I hope that further improvement will be made during the coming year.

Lime-washing.

Lime-washing is well known as a cleanser and disinfecter. For the purpose of encouraging householders to use it more freely, brushes are lent out from the Health Office. A deposit of 6d. is left for the brush, and a charge of 2d. is made for the first day, and a 1d. for each following day. During the year, brushes have been lent out 146 times.

Street Scavenging.

The number of men engaged on the regular staff for street cleansing is 30. Two horse machine brushes are worked during the night in sweeping the main roads, a gang of 16 men follow the machines, and the sweepings are collected and carted to the depot; 14 men with hand carts are engaged in different parts of the town collecting the usual street litter.

In addition to the refuse collected by the hand cart men, 1,716 loads of sweepings have been collected from the streets, and 1,429 loads of refuse from the street gullies; fortunately, snow has caused very little trouble during the year.

Removal of House and Shop Refuse.

The following is approximately the number of the different types of receptacle used for house refuse:—

Ashpits.	Ashtubs.	Ashbins. (in fixed frames).	Ashbins. (Loose).
5,000	990	1,006	507

The amount of refuse collected and removed to the Destroyors was 10,980 tons, and 535 tons (estimated) deposited on various tips, making a total of 11,515 tons.

The weight of refuse works out at 1 ton 86-lbs. per house, or 5 cwt. per inhabitant per annum.

In addition to the above, all vegetable and fish refuse is collected daily from greengrocers, fish dealers, and fish and chip caterers, the number of daily calls being about 118.

The number of refuse receptacles emptied during the year has been as follows :—

Ashpits.	Ashtubs.	Ashbins.
64,682	27,902	65,839

The average number of times each receptacle has been emptied during the year works out at 21. This is an improvement on previous years, but short of the ideal, and I am hoping to see the time when each house will have refuse removed at least once in each week.

The number of ashtubs is gradually being reduced, and galvanized bins substituted.

There are many different types of ashpits which do not comply with modern requirements, the common type serving two houses, and situated between the closets and coal-places, the size being about 6' 0" x 3' 9" with a door in the back street for cleaning out purposes. It will be understood that if these are emptied weekly, they are larger than necessary, and a large surface is always in a foul state.

If bins are placed in these ashpits, little improvement is effected, it has been frequently noticed where bins have been placed in this position, the bins were found empty and covered with refuse. I have concluded that where this type of ashpit obtains, the only way to make a good improvement is to reconstruct the closets, etc., and fix wall-bins. The cost, however, is prohibitive.

The fixed wall-frame and loose bin was introduced in 1907. There are now 1,006 in use, and have proved more sanitary and economical than any other type. The frames and doors are made by the Health Department, and designed to meet the hard usage they are subject to. It is interesting to note that at the Sanitary Institute Exhibition, held at Blackpool, a Bronze Medal was awarded for a similar design.

The loose bin, which is generally adopted for common yards, is not altogether a success. The bins seem to be an attraction for children, who are frequently seen rooting among the contents, or rolling the lids about, and indifferent tenants often misuse the bins, in one case I found a lid missing, and on making enquiries, I found the lid being used as a cover for a wash-boiler, in another case I found the refuse emptied on the floor, and the good housewife busy washing clothes in the ashbin.

Destructors.

The following shows the weight of material sorted from the refuse, also waste paper collected from business premises, and the amount realised for same, together with the residual, etc., from the destructors.

	Weight. T. C. Q.	Amount realised. £ s. d.	
		£	s. d.
Waste paper	83 14 2	62	15 11
,, (School) ..	1 10 1	1	18 1
String	0 8 3	1	6 3
Bright tins	38 1 2	29	1 5
Other scrap metal ..	45 0 1	30	7 5
Clinker	1280 9 0	64	0 6
Mortar	3782 2 0	871	1 6
Fish Manure	32 6 2	247	18 5
Calorific power (Electricity Department)		533	3 5
		£1841	12 11
Last year		£1816	12 0
		=====	=====

The accompanying table shows the cost of collecting and destroying the refuse from 1901 to 1914 inclusive.

RICHARD DIGGLE,

Chief Sanitary Inspector
and Cleansing Superintendent.

BOROUGH OF ACCRINGTON.

Cost of Collection and Destruction of Refuse.

1901 to 1914 inclusive.

	DOMESTIC REFUSE.						Market Fish and Trade Refuse.	Total Weight of Refuse.	COST OF COLLECTION. (Domestic Refuse only).						Cost of Destruction (all refuse) Wages only.		TOTAL COST.			
	No. of Loads	Weight.	Average weight per Load.	Manual Labour.					Team Labour.			Amount	per ton	Amount	per ton	Amount	per ton			
				T.	C.	Q.	T.	C.	Q.	T.	C.	Q.	£	s.	d.	d.	£	s.	d.	
1901..	8783	10416	12	1	1	3	2	363	7	3	10780	0	0	453	3	8	10.4	890	15	6
1902..	9418	11503	13	3	1	4	1	441	17	1	11945	11	0	476	2	5	9.9	978	1	6
1903..	7961	11031	9	2	1	7	2	493	7	2	11524	17	0	409	7	9	8.9	836	7	6
1904..	7438	11468	5	1	1	10	3	497	16	3	11966	2	0	440	5	10	9.2	765	6	9
1905..	7373	11282	10	2	1	10	2	512	6	1	11794	16	3	412	8	11	8.7	776	14	0
1906*	6558	8916	11	1	1	7	1	373	7	3	9289	19	0	321	17	4	8.6	626	1	3
1907..	9045	11922	19	0	1	6	1	565	2	2	12488	1	2	439	16	2	8.8	845	5	5
1908..	9228	12009	15	0	1	6	0	637	10	0	12647	5	0	465	10	5	9.3	824	19	10
1909..	9125	11782	4	2	1	5	3	611	14	2	12393	19	0	475	14	6	9.6	819	7	5
1910..	9071	12061	16	3	1	6	2	603	11	1	12665	8	0	480	16	6	9.5	817	9	10
1911..	9012	11365	5	1	1	5	1	544	6	3	11909	12	0	486	17	0	10.2	803	15	0
1912..	8778	12130	5	3	1	7	2	568	19	3	12699	5	2	485	12	7	9.6	844	2	1
1913..	8046	11703	11	3	1	9	0	597	2	0	12300	13	3	496	14	6	10.2	843	14	10
1914..	7151	10942	12	2	1	10	2	690	5	0	11632	17	2	532	14	3	11.7	794	9	0
																		1	5.4	
																		954	10	4
																		1	7.7	
																		2281	13	7
																		4	0.8	

* In May, June, and July, the Destructors were shut down for alterations, and during that time, 1,909 Loads of Refuse were tipped at the various tips.

